MegaFan TECHNOLOGIES

Installation Manual

Installation Manual Contents

Anatomy of a Fan 4

Check Your Shipment, What's Included For 10 & 6 Blade Fans 5

What You Need To Get Started 5

1 Important Information, PLEASE READ FIRST 6

1.1 Key Safety System Components 6

1.2 Placement and Spacing 6

1.3 Fan Clearance Drawing 6

1.4 Mark Floor To Alert Personnel 6

1.5 Sprinkler Systems and Fan Placement 7

1.6 Locating Control Panels 7

1.7 Connecting Fans to Remote Controls 7

1.8 Shielded Motor Cable 8

1.9 Check Regulations 8

2.0 General Mounting Considerations 8

2.1 Weight 8

2.2 Torque 8

2.3 Safety Cable 8

2.4 Close Clearances 9

2.5 Guy Cables 9

2.6 Guards 9

2.7 Universal Mounting Hardware 9

2.8 Maintenance 10

Control Panel 10

Power Unit 10

Mounting Hardware 10

2 Installation Procedures 11

Step 1, Install Mounting Hardware 11

Step 2, Attach Power Unit To Mounting Hardware 11

Step 3, Attach Safety Cable 12

Step 4, Mount The Motor Control Panel 13

Step 5, Mount Remote Switchbox 13

Step 6, Make Control Circuit Connections 13

Step 7, Make Motor Lead Connections 14

Step 8, Install Guy Wires 16

Step 9, Install Fan Blades, Blade Safety Links, & Safety Link Extenders 17

Step 10, Check Clearances And Guy Wire Tension For Safety 18

Step 11, Install Guards If Necessary 18

Step 12, Install Input Power 18

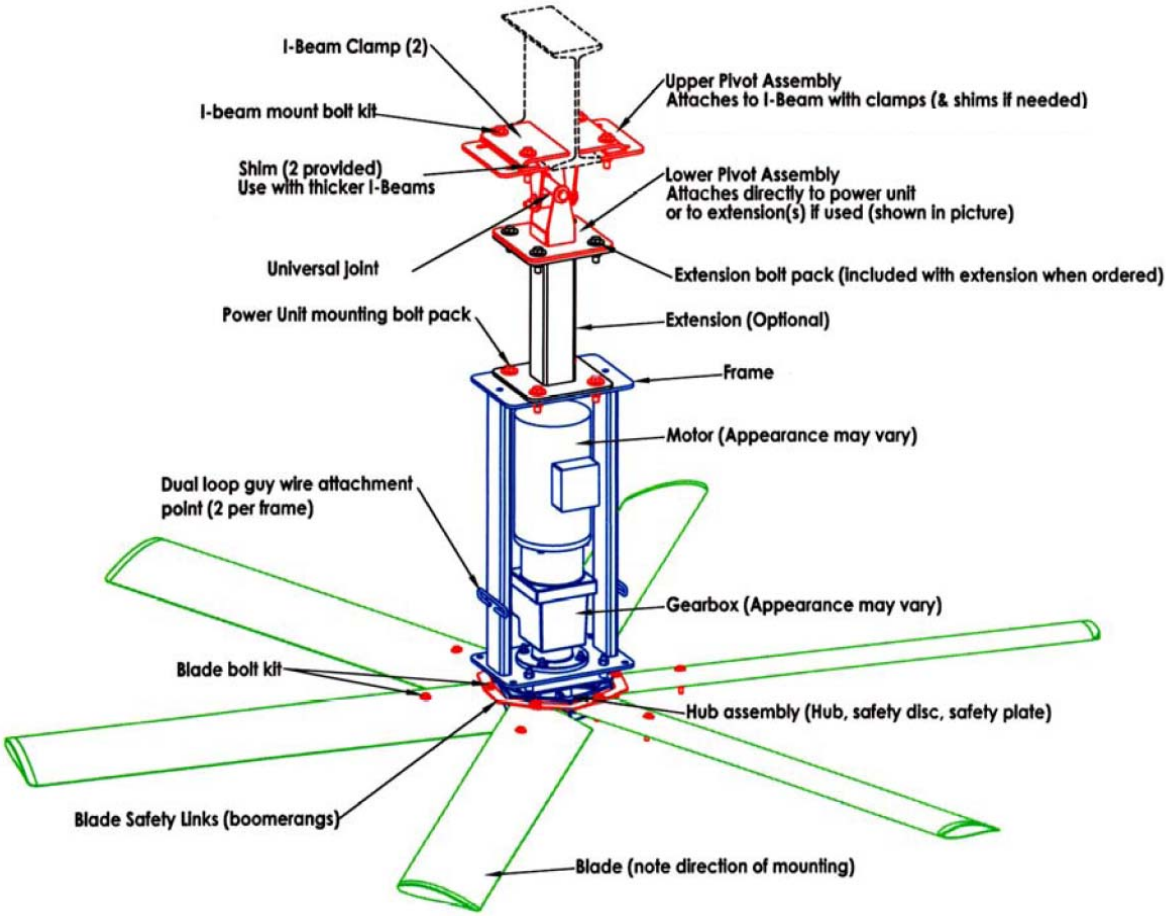
Step 13, Verify Proper Operation 19

Regulatory Notice 20

EMI | Electromagnetic Interference 20

Contact Information 20

Anatomy of a Fan


I-Beam Clamp (2)
I-beam mount bolt kit
Shim (2 provided)
Use with thicker I-Beams
Universal Joint
Power Unit mounting bolt pack
Dual loop guy wire attachment
point (2 per frame)
Blade bolt kit
Blade Safety Links (boomerangs)
Upper Pivot Assembly
Attaches to I-Beam with clamps (& shims if needed)
Lower Pivot Assembly
Attaches directly to power unit
or to extension(s) if used (shown in picture)
Extension bolt pack (included with extension when ordered)
Extension (Optional)
Frame
Motor (Appearance may vary)
Gearbox (Appearance may vary)
Hub assembly (Hub, safety disc, safety plate)
Blade (note direction of mounting)

Check Your Shipment, What's Included For 10 & 6 Blade Fans

Blade Carton (Blades)

Power Unit Carton

Remote Control Box (where applicable)

Motor Control Panel with Variable

Variable Frequency Drive (where applicable)
Owner's Manual with Warranty Card
Installation Manual

Gearbox Vent Cap (For Dodge Only)

Power Unit (all preassembled)
Hub
Frame
Gearbox
Motor with Junction Box
Safety System

Universal Mounting Hardware
Swivel Mount Assembly
4 Guy Wire Cables 1/8 inch
Guy Wire Clamp Kit (includes tension tool)
Safety Cable ¼ inch
Safety Cable Bolt Pack
Blade Bolt Pack
Mounting Hardware Pack
Blade Safety Links (boomerang-shaped)
Clamps
Shims
Safety Link Extensions

Blade Boxes

Power Unit Carton

What You Need To Get Started

Scissor Lift

5/16 inch through ¾ inch spanner and socket set

Phillips and standard screw driver

Pair of ¾ inch wrench and sockets

Pair of ½ inch wrenches or wrench and sockets

5/16 inch sockets or wrench

Please Read this Important Information Before you Install Fans

• Make sure Power is OFF before beginning any installation or maintenance procedure.

• Refer to the enclosed packing list and verify that all fan components are included before you begin.

1.1 Key Safety System Components

MegaFans are engineered with key safety features to prevent pieces of the fan from falling in the unlikely event of a catastrophic failure. Used together, these systems and devices provide comprehensive protection of people, equipment, and property. Follow the detailed instructions precisely when installing fans, including the installation of the following:

Install safety cable and guy wires on every fan. Properly installed, the guy wires will keep the fan stable in case of earthquake or, for "outdoor" installations where high wind conditions may occur. The safety cable, if installed per MegaFan specifications, will prevent the fan from falling in the unlikely event the mounting system should fail.

Install the complete set of blade safety links, which connect each blade to the adjacent blades, and the safety link extensions, which reinforce the area between the mounting holes. This is an important precautionary measure should a blade break off at the hub for any reason.

1.2 Placement and Spacing

Check the area where fans will be mounted to determine vertical and horizontal spatial clearances. A standard ceiling fan is mounted so the measurement from the bottom of the beam to the bottom of a fan's hub is 900mm.

Extensions may be ordered to lower the fan if needed. Ceiling fans should be mounted so the lowest part; the blades, are located at a minimum of 3M above the floor.

If possible, avoid mounting fans directly below lights or skylights to avoid any strobe effect caused by moving blades.

Note, a large fan, 6.1 – 7.3M in diameter, performs best at 6 to 9M above the floor, but acceptable performance has been demonstrated as low as 3M and as high as 15M.

If the building has a mezzanine, fans should be mounted so a person can not reach a fan in any way from the upper level/deck. Make certain fans are positioned so the blade tips are at least 900mm away from any area where a person may be able to extend outward to reach them.

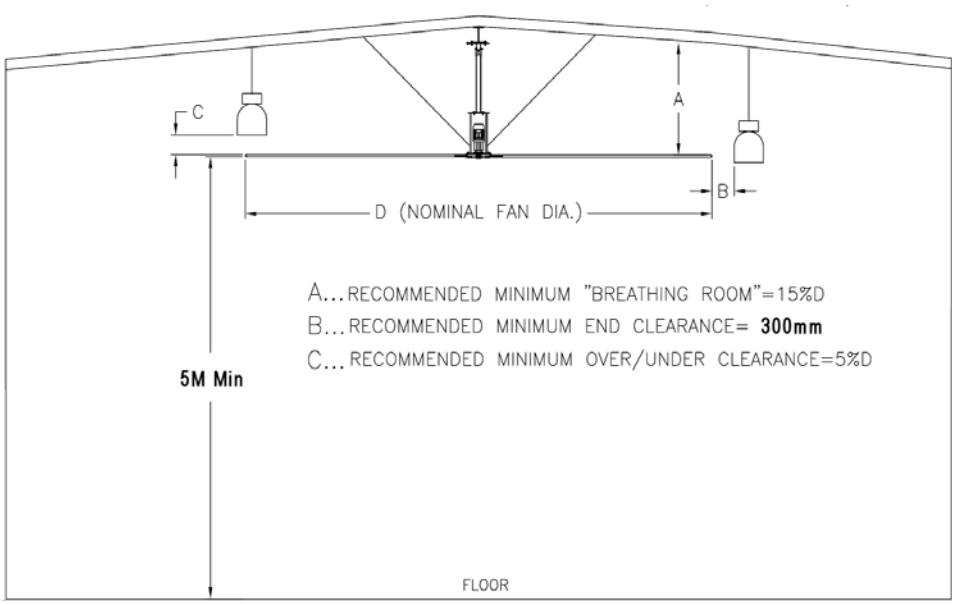
1.3 Fan Clearance Drawing

Note, fans must be far enough below the ceiling to allow proper air circulation — no closer than 15% of the fan diameter. Due to the design of our fans and mounting hardware, fan blades droop approximately six inches below the bottom of the hub when the fan is at rest. If required, extension mounts are available from the factory. For more information, refer to the "Fan Clearance" drawing, see Figure 1 on page 8.

1.4 Mark Floor to Alert Personnel

When mounting a fan in an area where materials may be elevated into its path, MegaFan recommends marking or painting the floor with a large crosshatched circle to alert personnel of the overhead location of fans.

1.5 Sprinkler Systems and Fan Placement



In any installation where fire sprinklers are in place, do not interfere with their correct operation.

Note; fans should be located not less than 900mm below a sprinkler, and placed central to each sprinkler quadrant.

Our standard variable-speed control system can be connected to a fire suppression control system, which will emergency-stop fans in case of fire.

Prior to installing fans, review all regulations applicable to sprinkler systems and fans to ensure compliance. Refer to the wiring diagrams packaged inside the control panel for proper installation.

If further advice is needed, you may contact our support staff. However, it is your sole responsibility to see that the installation is completed to regulations and that it is correct.

1.6 Locating Control Panels

Each fan has its own motor control panel (MCP). A motor control panel must be mounted at least 1.5 M outside maximum blade length, and within 25 M of the fan. Make sure the lockable service disconnect located on the side of the MCP is within line of sight of the motor to comply with safety regulations.

1.7 Connecting Fans to Remote Controls

You may control one fan or many fans with a single remote control station. The remote control station should be located no more than 50M from the first motor control panel. Fans may also be controlled with temperature control sensors and building automation systems. Contact technical support for more information.

1.8 Shielded Motor Cable (For Variable Frequency Drives)

To minimize electromagnetic interference and stray voltage, each MegaFan fan assembly should be wired in shielded motor cable, EMC cable glands, and powered by a variable frequency drive with a built-in filter.
The shielded motor cable connects the fan motor to the motor control panel. This system reduces the likelihood of electronic-broadcasting and receiving which can interfere with radio and other sensitive equipment.

1.9 Check Regulations

Check all relevant regulations to make sure all product certifications, product listings, and building regulations are met. Regulation compliance is the responsibility of the installer.

2.0 General Mounting Considerations (I-Beam, Glulam Beam, or Other Type of Truss System)

Each type of mounting system (I-beam, glulam, or other) requires a specific mounting bracket.

Most are available from Megafan Technologies Ltd. Before installing fans, check with the contractor, building owner, or architect to ensure the building structure is sound and will support the weight of the fan.

MegaFan Technologies provides guidelines for mounting fans; however, it is the sole responsibility of the building owner and installer to ensure the safety of the mounting system, that the building structure is sound, and that the installation complies with all relevant regulations.

2.1 Weight

A standard 6M 6-blade fan weighs about 105kg, the 10-blade version about 148kg, including the standard mounting hardware.

In inverted-blade applications designed to blow air upward (very unusual), there is an additional down force of about 45kg due to fan thrust. We recommend that a building structure be capable of holding approximately twice the stated hanging weight of the fan. If there is some doubt of this, a professional contractor or architect should perform a thorough evaluation of the building prior to purchasing fans.

2.2 Torque

The maximum torque (twisting force) that must be handled by the mounting system, including building structure, occurs at fan startup. For a 6M fan, maximum potential starting torque is 13 N/M.
When standard electrical controls are installed, the fan will never begin to approach this maximum because the standard variable-speed control system uses soft-start technology. However, should the soft-start fail, or when a fan is installed as a single-speed model without the variable speed control system (rare), full torque might be applied to the mounting system, so it is important that it be adequate to withstand 13 N/M torque.

2.3 Safety Cable

A MegaFan fan should never be run without a properly installed safety cable, which is supplied with every fan along with all required hardware. You must install safety cable for warranty to be in effect.

2.4 Close Clearances

The area within 900mm of the blade tips when the fan is at rest is considered "close clearance". It is EXTREMELY DANGEROUS to mount the fans within "close clearance" of any object. We strongly recommend not mounting the fan closer than 15% of its diameter to any object.
If this is an issue, mounting extensions and smaller fans are available from MegaFan.

2.5 Guy Cables

A running fan can sway due to a minor imbalance or because of wind. "Wind" may be only the air movement the fan itself generates, or it may be actual wind if the fan is mounted outdoors or in open areas.

Since the mounting system is free swiveling, it will not stop fan movement, so it is imperative that guy wires be properly installed. The primary considerations are angle and tension of the guy wires. See Step 10 for more information.

2.6 Guards

If there is potential for people or objects to come in contact with a running fan, it is best to construct a guard from angle iron and steel mesh, attaching it securely to the building structure.

The guard should be mounted with sufficient clearance so that no part of it can be pushed into the fan, with at least 450mm of clearance on all sides. We recommend 50 x 50 x 4mm angle-iron for the frame, and, in most cases, 50 x 50 x 280mm gage weldmesh (1.5mm diameter wire on 50mm centers) for the screen. However, mesh size should be dependent on what objects might come in contact with the fan — if, for example, employees on lifts can inadvertently get a finger into a fan, use smaller mesh or greater spacing — HSE guidelines state that a finger guard must prevent a finger entering into the guard within 120mm of the moving device, the fan blades in this case.

2.7 Universal Mounting Hardware

We recommend mounting the fan to a horizontal structural beam, but this is not always possible in buildings with pitched roof construction.

For that reason, our universal mount is designed to swivel freely in order to allow the fan to hang in a level position regardless of the angle of the beam it is mounted to.

Our mounting hardware package includes clamps for use with standard steel I-beams, shims for thicker steel I beams, and all necessary nuts and bolts.

For buildings with glulam beams (laminated wood), an additional set of brackets, available from the factory, is required.

2.8 Maintenance

Before servicing the fan or control panel ensure all POWER IS OFF and locked out to avoid injury.

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Control Panel

Occasional cleaning is advisable, especially when the panel is located in a dusty or dirty environment. A can of compressed air, like that used for computer cleaning, works well to clean the inside of the panel. Simply wipe down the outside of the enclosure with a cloth or duster periodically, if desired.

Power Unit

The gearbox is lubed for life, and we use thread locking compound on critical nuts and bolts. However, it is a good idea to occasionally check that no nuts or bolts have vibrated loose. No other maintenance is required.

Mounting Hardware

Check all mounting bolts annually to be sure they have not loosened. Also, check the safety cable and guy wires to be sure they are not loose or frayed. Loose guy wires are more likely to break than tight ones, and broken guy wires may fall into the fan. If a guy wire is loose, carefully check to be sure it is not damaged, and re-tighten it.

2 Installation Procedures

Step 1, Install mounting hardware

For **steel I-Beam installations**, mount so that the large plate is against the bottom of the beam. Be sure the plate is at a 90 degree angle to the beam and centered. Place the supplied clamps on top of the beam and attach them to the mount using the supplied fasteners. For thicker I-beams, use the supplied shims between the clamp and the mount as shown below.

Note: In all cases, be sure to thoroughly tighten all mounting bolts and nuts. The nylon lock nuts help prevent loosening due to vibration, but there is no substitute for proper tightening. We recommend that nylon lock nuts not be removed and reused because this will defeat the nylon locking; instead, buy new nylon lock nuts from your local hardware store.

If an extension is to be used, attach it to the bottom of the universal mount using the fasteners provided with the extension. Also, be sure to save the longer safety cable and guy wire supplied with the extension; they will be needed in a later step.

Loop supplied safety cable (6mm steel braided cable) over the beam and let it hang. It will be attached once the power unit is installed. If using an extension, be sure to use the longer safety cable supplied with the extension.

Step 2, Attach Power Unit To Mounting Hardware

A) We recommend using a scissor lift to install our fans. The best method is to place the power unit hub-down on the lift and raise the lift until the power unit frame touches the bottom of the universal mount or extension (if used).

B) Once the motor frame is in contact with the mount/extension, maneuver the power unit as necessary to line up the mounting holes.

C) Securely attach the power unit to the mount/extension using the 13mm x 40mm bolts, washers, and nylon lock nuts included in the mounting hardware kit. Be sure to thoroughly tighten all four bolts and nylon lock nuts to prevent vibration-related loosening. Correct tightening is extremely important. Again, do not re-use nylon lock nuts.

Step 3, Attach Safety Cable

Refer to figure 4 as necessary. **This step is required, omitting it will void manufacturer's warranty!**

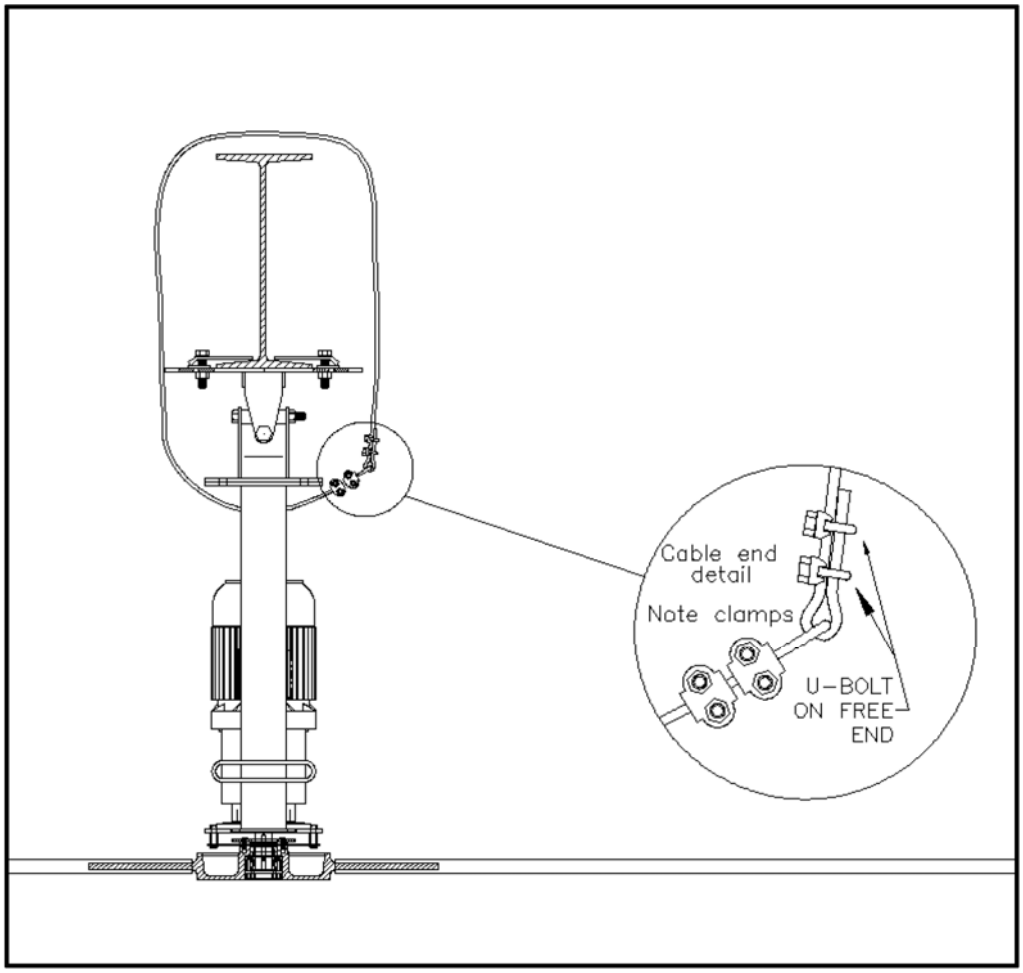
A) Slide two of the supplied large cable clamps over each end of the safety cable.

B) Make a loop in one end of the cable, sliding the end back through the safety clamps.

C) Feed the other end of the safety cable through the loop, making sure that the cable goes through the motor frame.

D) Repeat step B for this end of the cable.

E) Tighten the clamps securely, making sure that the u-bolts are over the free end of the cable, as shown below.



Step 4, Mount The Motor Control Panel

Select a location for the MCP (Motor Control Panel) and mount securely.

A) The MCP should be mounted in the upright position, vertically, with the door opening to the left. *Do not mount* so that the door opens downward. The mounting surface must be non-flammable, away from sources of heat, dust, moisture, and vibration.

B) The MCP should be mounted at least 1.5 M outside of the swept area of the fan blades; this will allow safe operation of the fan and still provide access to the MCP when the fan is running.

C) Be sure to keep the lockable service disconnect located on the side of the MCP within line of sight of the fan motor to comply with safety regulations.

D) Mount the MCP, making sure the enclosure is firmly fixed to the mounting surface.

Step 5, Mount Remote Operator Station

Select a location for the remote operator station and mount securely.

A) The remote operator station should be no more than 50M away from the first MCP.

B) Mount the remote switch box in a location that is easily accessible for personnel authorized to operate the fan.

C) Locate the remote operator station in an area where it will be safe from damage caused by unintended contact.

D) Securely mount the remote enclosure, making sure it cannot be easily detached by incidental contact.

Step 6, Make Control Circuit Connections

A) Strip cable and conductors at both ends.

B) Install one supplied strain relief fitting in the remote switchbox and make appropriate connections, referring to the wiring diagram (on page 28) packaged in the control panel and/or the sticker inside the remote enclosure. Close up the remote enclosure.

C) Install the other supplied strain relief fitting in the MCP enclosure and make control circuit connections at the terminal strip of the VFD located inside the MCP, see included wiring diagram (on page 28). Do not make any incoming power or motor lead connections at this time.

D) Ground the shield of the control circuit cable to the ground screw located in the lower left corner of the VFD next to the MAINS terminal.

E) Daisy chain additional controllers if used, see included wiring diagram (on page 28). Ground the shielding of the cable at the slave controller side only. There is no need to specifically designate a “Master” drive — any drive may be used as either a master or slave with no changes. If interfacing with any kind of automated building management system, however, please consult factory as there may be additional programming required.

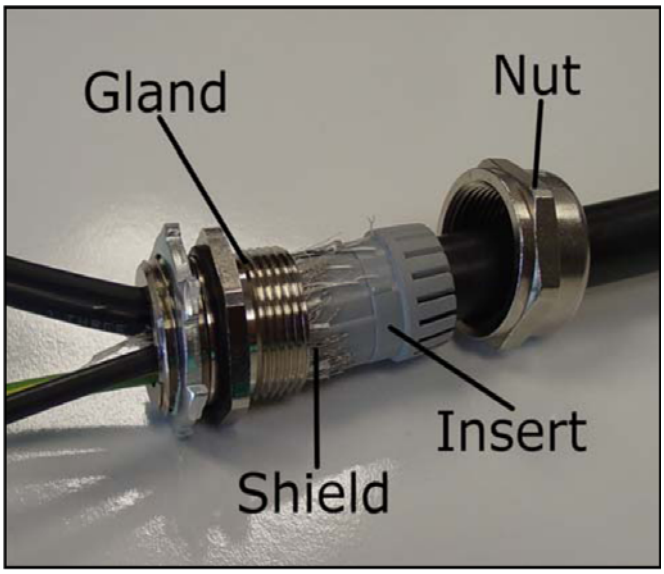
F) Route the control circuit cables away from all incoming power and motor cables, keeping them separated by at least 6 inches. When control circuit wiring must cross power cables, make sure they do so at 90 degree angles to minimize interference.

Step 7, Make Motor Lead Connections

A) Verify controller voltage; this can be found on the lower left corner of the MCP, as well as the sticker on the side of the VFD (see "input").

B) Use only the supplied motor cable for motor leads, be sure to attach all four wires — three for power, one for ground. The 25 foot cable is recommended to prevent voltage and frequency fluctuations, which could cause the motor to malfunction and/or be damaged. Consult the factory if a longer cable is required.

C) Route motor cable away from all other power and control cables. Keep motor cable at least 6 inches away from input power and control wiring. If the motor cable must cross power cables or other motor control cables, make sure they do so at 90 degree angles to minimize interference. Avoid long parallel runs to prevent signal crossover.



D) Correctly install supplied cable glands at both ends of the motor cable (see Figure 5).

i) Take the cable gland apart and slide the gland nut over the end of the cable, threads facing the cable end.

ii) Slide the plastic and rubber cable gland insert over the end of the cable, with the larger end toward the middle of the cable.

iii) Strip the outer insulation of the cable back approximately 75mm, leaving approximately 50mm of metal and foil braid sticking out past the outer insulation.

iv) Slide the cable gland insert up the cable until it is flush with the outer insulation.

v) Peel the foil and braid insulation back and fold it down over the cable gland insert.

vi) Cut off any inner (plastic) insulation that remains.

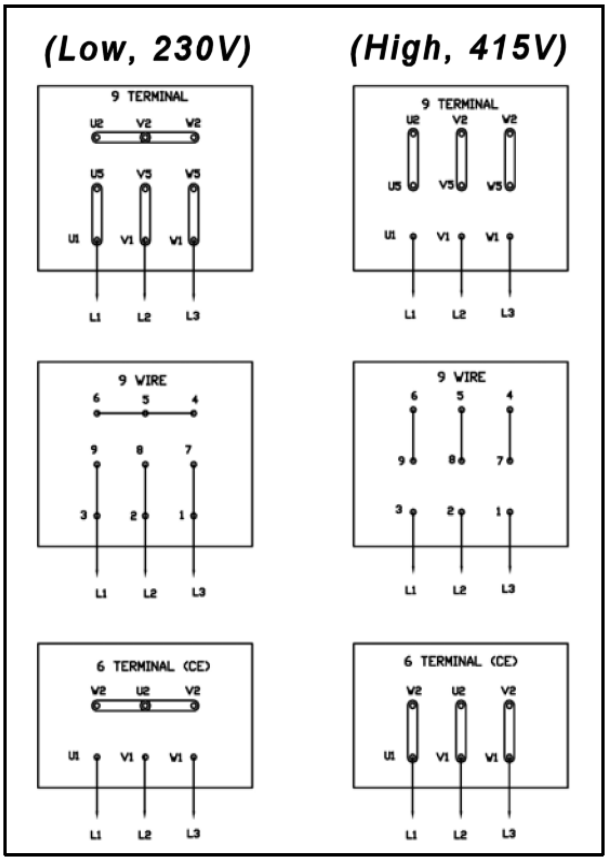
vii) Slide the threaded part of the cable gland over the end of the cable, long side down. Work it down over the insert until only the "fingers" of the insert are visible, turning either piece as necessary to ensure a proper fit.

viii) Slide the gland nut up and tighten it securely onto the gland.

E) Connect the ground wire to the green screw located inside of the motor junction box.

F) Wire motor leads for the appropriate voltage, referring to Figure 6. Note that the top four diagrams are for U.S. motors, while the bottom two are for CE motors, usually for use inside the U.K. Be certain to wire the motor for the correct voltage — a mistake here can ruin the motor and/or the VFD and is not covered under the factory warranty.

G) Connect motor ground wire to the ground bar located inside of the Control Panel.



Note: ALWAYS connect the ground wire of the screened motor cable at both ends, MCP and motor.

H) Connect motor leads to terminals U, V, & W on the VFD.

Step 8, Install Guy Wires

If an extension is installed, be sure to use the longer guy wires packaged with it. Be sure to use four guy wires, with two clamps per end (four per guy wire). Keep the angle formed by the guy wire and the floor less than 45 degrees. If longer guy wire is required, it is available inexpensively at most hardware stores.

Eye bolts are recommended to attach the wires to the building structure.

Note: This step is REQUIRED — omitting it may void manufacturer's warranty!

A) Be sure not to wrap the wire around any sharp corners to avoid fatiguing and fraying.

B) Attach the guy wires to the building structure.

i) Slide two of the supplied small cable clamps over one end of the wire.

ii) Feed that end of the wire through the eye bolt and back through the cable clamps.

iii) Tighten the cable clamps securely, keeping the u-bolt side over the free end of the cable — see figure 4 (in step 3 on page 12).

C) Attach the guy wires to the loops on the lower section of the fan, one wire per individual loop.

i) Slide two of the supplied small cable clamps over the near end of the wire.

ii) Feed that end of the wire through the guy wire loop on the fan and back through the clamps, taking all the slack out of the cable.

iii) Slide one clamp approximately 450mm (or as close to 450mm as possible) from the fan and tighten it securely — it needs to hold the free end of the wire in place during the tensioning process.

iv) Position the other clamp about two inches from the fan and tighten it just far enough to hold it in place.

v) Remove the rest of the slack, one guy wire at a time, using the included guy wire wrench. It is advisable to put a level on the hub to be sure the fan remains horizontal.

1) Attach the tool to a 3/8 inch drive ratchet.
2) Loop the tool through the free end of the guy wire between the clamps and turn clockwise as far as possible.
3) Tighten the inner clamp to hold the tension.
4) Repeat until all excess slack is out of the wire.

vi) Loosen the outer cable clamps, pull the slack out of the free end of the wire, and position the clamp about 18 inches from the inner one.

vii) Re-tighten the outer clamp and double-check that the inner clamp is tight. Be sure the u-bolt is over the free end of the wire to prevent slipping.

viii) Repeat for all guy wires.

ix) Re-check all clamps for tightness.

Step 9, Install Fan Blades, Blade Safety Links, & Safety Link Extenders

A) Install the fan blades.

i) Be sure to orient the blades correctly — they should curve toward the floor (thin edge down). Whisperfoil XL blades (our standard blade) will slide on easily either way; Whisperfoil and Wickerbill blades are harder to install upside down, but can be forced.

(If you are installing an inverted-blade fan (rare), the blades should curve away from the floor. ONLY install the blades in this direction if the hub is painted black and you want the fan to blow air up.)

ii) Slide one blade over any hub winglet. Make sure it's facing the right way!

iii) Line up the bolt holes in the blade with the holes in the winglet.

iv) Put a bolt from the included blade bolt pack through the outer hole, using a washer on top of the blade.

B) Install safety links (often referred to as "boomerangs" because of their shape) and safety link extensions. **This step is REQUIRED — omitting it will void manufacturer's warranty!**

i) Line up one hole of a safety link with the inner hole of one wing. If desired, put a bolt through just to hold it — don't put a nut on it at this point, though.

ii) Line up the other hole of the safety link with the inner hole on the next wing. Place a second safety link on top, lining up all three holes.

iii) Put a bolt through the holes — don't use a washer on the top side of the blade.

iv) Slide the safety link extension over the bolts from the bottom side of the blade and securely tighten an included nylon lock nut onto each of the bolts. Do not use any washers! The safety link will bend when the nut closest to the hub is tightened due to the angle of the hub winglets.

v) Repeat for the rest of the blades.

v) Once the starting point is reached, pull out the positioning bolt from step i (if used). Slide the end of the final safety link under the end of the first safety link. Put the bolt (back) through and attach like the rest, being sure to install the safety link extension on the underside of the blade.

C) Check that all bolts are tightened firmly. Blades should not rattle when the fan is running.

Step 10, Check Clearances And Guy Wire Tension For Safety

A) Rotate the fan slowly one time by hand to find the position and blade with the least clearance from any possible obstructions. If necessary, reposition the fan to prevent any dangerous conditions.

Note: At rest, the blade tips hang lower than they will be in operation due to gravity. For our largest fans, this deflection can be approximately six inches.

B) Double check guy wire tension by attempting to move the fan in any horizontal direction and by trying to pull down on the guy wires. They should be very difficult to move. If there is visible slack in any guy wire or if any moves easily, re-tension them before proceeding.

Step 11, Install Guards If Necessary

Refer to Section 2.6 of the MegaFan Installation Manual for guidelines.

Step 12, Install Input Power

A) Verify that input power voltage and number of phases match that of the MCP.

B) Determine the appropriate size for the input circuit by multiplying the maximum input amperage of the VFD — found on the door of the MCP and on the included control panel drawing (wiring diagram) — by the number of fans to be placed on the circuit. Be sure the breakers used match the voltage of the VFD. Each MCP contains input fuses providing individual circuit protection for each unit, but an appropriately-sized input breaker should still be installed.

C) Connect a ground wire from the supply panel to the ground bar located inside of MCP.

Note: ALWAYS connect the grounding bar in the MCP to ground at the power panel — when pulling power from the main panel; be sure to pull a full sized ground.

D) Connect input power leads to the disconnect switch located on the side of the MCP at the proper terminals.

Step 13, Verify Proper Operation

Leave the door of the MCP open during this process so the front of the VFD is visible.

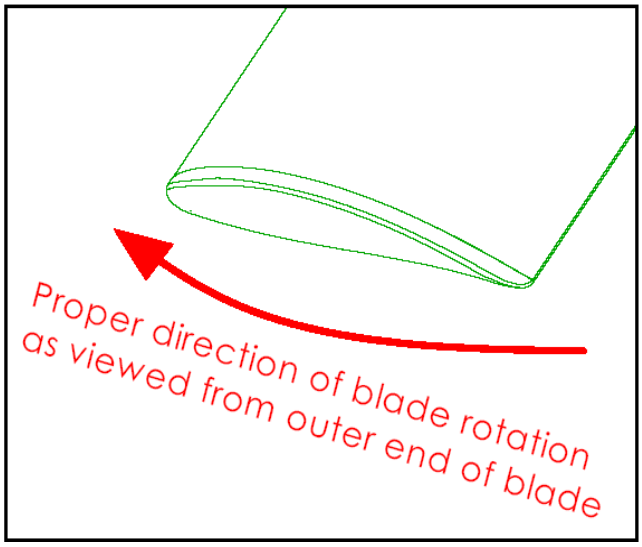
A) Turn the isolator to the On position. When power is applied, the green On indicator (located on the front of the VFD) will light.

B) Adjust the speed control knob (located on the remote switchbox) to 4.

C) Turn the For-Off-Rev (Forward/ Off/ Reverse) switch (located on the remote switchbox) to the For (Forward) position.

D) After a 15 second delay, the fan will begin to accelerate slowly.

E) Verify proper rotation with the For-Off-Rev switch in the For position: the rotor should be turning in the counter-clockwise direction when viewed from the floor — see figure 9.



F) If the fan is turning the wrong way on initial startup, follow the procedure below:

i) Verify that the For-Off-Rev switch is in the For position.
ii) If so, turn the switch to the Off position.
iii) Carefully remove the remote box faceplate with the switches attached and turn it over. Verify that the wiring to the For-Off-Rev switch matches the wiring diagram (there should be a sticker inside the remote enclosure). If it's wrong, correct it and re-test the fan. Reattach the faceplate (before testing).
iv) If step iii does not solve the problem, turn off the disconnect switch on the MCP and snap the small cover off the VFD. Ensure that the wiring matches the wiring diagram — this can be found on the included control panel drawing as well as on a sticker inside the control panel door. If this wiring is wrong, correct it, replace the cover, and test the fan again.
v) If step iv does not solve the problem, simply switch any two of the three power wires from the MCP to the fan motor, either at the MCP or at the motor. Turn the power back on and re-test the fan.
vi) If none of these steps fix the problem (extremely unlikely,) contact the factory for further assistance.

vii) Be sure the remote box is re-assembled and the cover is back on the VFD before proceeding.

G) Adjust the speed control to 9 and verify full speed operation with no Fault or Warning indicators lit on the VFD. Contact factory if fault/warning condition occurs.

H) Close up the MCP.

I) Adjust fan speed and direction for desired operation.

Regulatory Notice

EMI | Electromagnetic Interference

Electromagnetic Interference (EMI) is any signal or emission, radiated in free space or conducted along power or signal leads, that endangers the functioning of radio navigation or other safety services or seriously degrades, obstructs, or repeatedly interrupts a licensed radio communications service.

Radio communications services include but are not limited to AM/FM commercial broadcast, television, cellular services, radar, air-traffic control, pagers, and personal communications services (PCS).

These licensed services, along with unintentional radiators such as digital devices, variable frequency drives (VFDs), and other equipment such as fans with VFDs, contribute to the electromagnetic environment.

Electromagnetic compatibility is the ability of items of electronic equipment to function properly together in the electronic environment.

MegaFan Fans with variable frequency drives, VFDs, are designed to be in compliance with regulatory agency limits for EMI. However, there is no guarantee that interference will not occur in a particular installation.

If MegaFan products (fans) do cause interference with radio communications services, which can be determined by turning the fans off and on, please notify MegaFans technical support.

MegaFan Technologies products are designed, tested, and classified for their intended electromagnetic environment. These electromagnetic environment classifications generally refer to the following harmonized definitions:

Class A is typically for business or industrial environment.

Class B (MegaFan products are **NOT** designed for typical residential environments covered under this classification.)

REGULATORY COMPLIANCE IS THE RESPONSIBILITY OF THE INSTALLER AND, ULTIMATELY, THE END USER.

Note; MegaFan Technologies has a policy of continuous product improvement and reserves the right to change design and specifications without notice.

Thank you for selecting The Original Big Fans from MegaFan Technologies.

If you have any questions please call technical support on +44(0)161 426 0218. We are happy to assist you.